

541,382  
10/541382

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 July 2004 (29.07.2004)

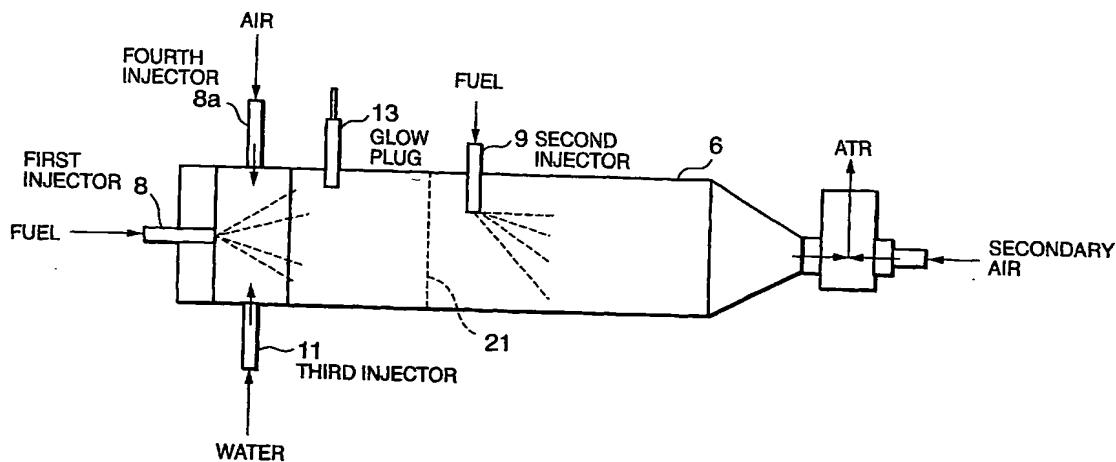
PCT

(10) International Publication Number  
WO 2004/062788 A1

- (51) International Patent Classification<sup>7</sup>: B01J 19/00,  
H01M 8/00, B01D 1/00, C01B 3/38
- (21) International Application Number:  
PCT/JP2003/015788
- (22) International Filing Date:  
10 December 2003 (10.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
2003-003594 9 January 2003 (09.01.2003) JP
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- (81) Designated States (national): CN, KR, US.
- (84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).
- Published:**  
— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

## (54) Title: FUEL VAPORIZING DEVICE



(57) Abstract: Hydrogen-rich reformate gas is produced by a fuel reformer (2) from fuel vapor containing hydrocarbon, which is produced by a fuel vaporizer (6), by means of a partial oxidation reaction and a steam reforming reaction. A fuel injector (8, 9) supplies fuel to the fuel vaporizer (6), and an air injector (8a) supplies air to the fuel vaporizer (6). A glow plug (13) partially oxidizes the air-fuel mixture inside the fuel vaporizer (6). By controlling the air supply amount in relation to the fuel supply amount to obtain an excess air factor corresponding to a predetermined rich air-fuel ratio, a part of the air-fuel mixture in the fuel vaporizer (6) is partially oxidized, and the remaining fuel vapor is heated by the oxidation heat. As a result, the partial oxidation reaction and steam reforming reaction in the fuel reformer (2) are performed with a favorable balance.

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